UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,167	01/03/2001	Ursula M. Schwuttke	06816/022002/CIT 2387-C1	2799

			EXAMINER
20985	7590	05/12/2004	GOOD JOHNSON, MOTILEWA

FISH & RICHARDSON, PC
12390 EL CAMINO REAL
SAN DIEGO, CA 92130-2081

ART UNIT	PAPER NUMBER
2672	7

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/754,167	Applicant(s) SCHWUTTKE ET AL.	
	Examiner Motilewa A. Good-Johnson	Art Unit 2672	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-89* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-89* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This office action is responsive to the following communications: Preliminary

Amendment A, filed 01/30/2001; Amendment B, filed 01/29/2004.

This action is made final.

2.   Claims 1-89 are pending in this application. Claims 1, 29, 41, 56, 67, 76, 80 and

82-83 are independent claims.

3.   The present title of this application is "Cyberspace Data Monitoring System" (as

originally filed).

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5.   Claims 1-89 are rejected under 35 U.S.C. 102(a) as being anticipated by

Hussaini, "Simple Bar Graph Displays for Control Variables and Alarm Status", IEEE

Electro/94 International. Conference Proceedings. Combined Volumes 10-12, May

1994, pages 651-656.

As per independent claim 1, a method, comprising: obtaining information

indicative of a plurality of different parameters, said plurality of different parameters

representing at least a plurality of different kinds of information, which information is

referenced to different units of measure; (Hussaini discloses graphic displays and alarm

messages for complex systems, page 651, col. 1) and using a plurality of towers

indicative of values of the parameters and displaying each of said plurality of different

parameters on a common display, (Hussaini discloses in figures 2-10) with parameters

that are within a nominal range of values each having a tower with a nominal same

height as all other parameters that are within their respective nominal range (Hussaini

discloses in figure 2, a level indicator, having the same height among each bar graph,

i.e. tower and the parameters within the nominal range having the same height) and

parameters which are outside a predefined nominal range having towers with an other-

than-nominal height. (Hussaini discloses in figure 3, parameters outside of the

predefined nominal range having towers with an other than normal height, i.e. the height

is not completely shaded to indicate height but show under flow and over flow

conditions)

With respect to dependent claim 2, wherein said displaying comprises displaying

towers indicative of values of the parameters, and said specified way includes towers

which have other-than-nominal height, wherein parameters within said nominal range

have nominal height. (Hussaini discloses displaying the graph in bar graph, i.e. tower,

and the value range shown blinking, page 653)

With respect to dependent claim 3, wherein said displaying comprises arranging

identification of a parameter along a first dimension, arranging categories of the

parameters along a second dimension, and defining values indicative of comparison

with said nominal range along a third dimension. (Hussaini discloses graphic displays,

page 651, therefore making it inherent that the parameters would be indicated along a

first, second and third dimension for 3-D and along a first and second dimension for a 2-D graphic display)

As per independent claim 4, further comprising obtaining information indicative of a plurality of different parameters, said plurality of different parameters representing at least a plurality of different kinds of information . . . referenced to different units of measure; (Hussaini discloses graphic displays and alarm messages in complex systems in scales and unit of measure for process operators may be displayed, page 652) displaying each of said plurality of different parameters on a common display, in a way such that only parameters among said plurality of said parameters representing each of said different kinds of information, which are outside a predefined nominal range, are shown in a specified way; (Hussaini discloses in figure 3, parameters outside of the predefined nominal range having towers with an other than normal height, i.e. the height is not completely shaded to indicate height but show under flow and over flow conditions) and displaying said each of said plurality of parameters based on an amount by which they are outside of said nominal range. (Hussaini discloses displaying bar graphs in a underflow and over flow conditions, center error bar graph, level bar graph with status at top element, range indicator bar graph, clock bar graph, bi-level bar graph, etc., pages 653-655)

With respect to dependent claim 5, further comprising defining an alarm level for each of said plurality of parameters. (Hussaini discloses several sub ranges to indicate alarm status, page 651)

With respect to dependent claim 6, further comprising displaying a common alarm grid representing alarm levels for each of said plurality of parameters, and wherein each of said parameters which is outside said nominal range is displayed according to its relationship with said common alarm grid. (Hussaini discloses in figure 9, range indicator bar graph)

With respect to dependent claim 7, further comprising allowing the user to rearrange positions of display of various parameters. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claims 8-10, wherein said alarm level is a warning level; critical level; limit alarm . . . outside a specified limit. (Hussaini discloses indicating alarm status ranges, page 652)

With respect to dependent claim 11, wherein said alarm limit comprises a range with a lower value and an upper value. (Hussaini discloses an under flow and over flow conditions, page 653)

With respect to dependent claim 12, wherein said alarm limit is a trend alarm which is based on a rate of change of a parameter, and indicates that a trend of a value of the parameter suggests that an alarm will occur in the future, prior to the alarm actually occurring. (Hussaini discloses dynamic graphic displays which show relative change, direction of change, rate of change, frequency of change, etc., page 651 and further discloses range indicator having a pre-alarm an approaching condition, page 655)

With respect to dependent claim 13, further comprising allowing parameters in an alarm state to be moved to a special alarm category on said common display. (Hussaini discloses the bar graphs are dynamic and programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 14, wherein said displaying comprises stopping said displaying objects in the specified way when they are moved to the alarm category, such that all objects in the alarm category as displayed in the same way as other objects are displayed in other categories, when said other objects are not in the alarm state. (Hussaini discloses a level indicator/ alarm status bar graph which indicates the alarm status according to its value in the alarm status ranges, page 653)

With respect to dependent claim 15, wherein said displaying comprises displaying objects having a height indicative of values of said parameters, and wherein said objects in the alarm category are displayed with zero height. (Hussaini discloses a center +- error bar graph with displacement respective to a center or zero value, page 654)

With respect to dependent claim 16, wherein said objects are displayed with a height indicative of a percentage by which the parameter exceeds said nominal range and approaches said alarm level. (Hussaini discloses range indication bar graph having a height which show the status ranges and pre-alarms approaching conditions, page 655)

With respect to dependent claim 17, further comprising displaying a color associated with a value of the parameter. (Hussaini discloses color-coding for the bar graph elements, page 653)

With respect to dependent claim 18, further comprising monitoring a continual increase or decrease in a value of the parameter over a specified interval to establish said trend alarm. (Hussaini discloses monitoring bar graph lengths for experimental data trend, page 652)

With respect to dependent claim 19, further comprising defining conditions, which establish a trend alarm, and monitoring said parameters for said conditions. (Hussaini discloses graphic displays for showing the dynamic characteristics such as rate of change, direction of change, relative change, frequency of change, etc., page 651)

With respect to dependent claim 20, further comprising monitoring a rate of change of a parameter over a specified period of time to establish said trend alarm. (Hussaini discloses the bar graph and useful for showing a rate of change, page 651)

With respect to dependent claim 21, wherein said trend alarm includes a warning trend alarm and a critical level trend alarm. (Hussaini discloses monitoring bar graph lengths for experimental data trend, page 652, and further discloses graphic display alarm messages for complex systems, page 651, therefore making it inherent to include alarm status on trend data)

With respect to dependent claim 22, further comprising allowing actuation of a detail screen for a specified parameter, by allowing the user to click on a representation

of the parameter using a graphical user interface. (Hussaini discloses bar graphs for use or process operators, page 652)

With respect to dependent claim 23, wherein said detail screen is on a pop up window. (Hussaini discloses locating the process on a central position may not be convenient but using effective displays for quick reading and timely operator response and further discloses blinking parameters, therefore making it inherent to not only use blinking parameters but also a pop up window, page 651)

With respect to dependent claim 24, further comprising also displaying information on other similar parameters in said detail screen. (Hussaini discloses in figure 4)

With respect to dependent claim 25, wherein said other similar parameters comprise other parameters having a same parameter category as a selected parameter. (Hussaini discloses in figure 6)

With respect to dependent claim 26, wherein said detail screen includes numbers representing values of the parameters. (Hussaini discloses in figure 2)

With respect to dependent claim 27, further comprising enabling an operation, which suppresses alarm notification for a specified time interval. (Hussaini discloses a blinking element and color of each graph, which can be programmed to a color and also blink on and off for a set time, page 653)

With respect to dependent claim 28, further comprising storing historical data files indicative of parameter values, and using said historical data files to establish a

trend alarm. (Hussaini discloses experimental data collected to show data trends for an

idea bar graph, page 652)

As per independent claim 29, a method comprising: obtaining information

indicative of a plurality of different parameters collectively representing a plurality of

different kinds of information, which different parameters have absolute values

representing at least a plurality of different measurement units; (Hussaini discloses

graphic displays and alarm messages in complex systems in scales and unit of

measure for process operators may be displayed, page 652) displaying information

about values of said parameters on a common graph with heights, such that only

parameters which differ from a specified nominal range are displayed with a non-

nominal height and parameters which are within said nominal range are displayed with

a same nominal height; (Hussaini discloses in figure 3, parameters outside of the

predefined nominal range having towers with an other than normal height, i.e. the height

is not completely shaded to indicate height but show under flow and over flow

conditions) and allowing selection of parameters, which are displayed in said prominent

way, and changing said parameters to be changed to being displayed in said

non-prominent way. (Hussaini discloses displaying bar graphs in a underflow and over

flow conditions, center error bar graph, level bar graph with status at top element, range

indicator bar graph, clock bar graph, bi-level bar graph, etc., pages 653-655)

As per independent claim 30, obtaining information indicative of a plurality of

different parameters collectively representing a plurality of different kinds of information,

which different parameters have absolute values representing at least a plurality of

different measurement units; (Hussaini discloses graphic displays and alarm messages

in complex systems in scales and unit of measure for process operators may be

displayed, page 652) displaying information about values of said parameters on a

common graph with heights, such that only parameters which differ from a specified

nominal range are displayed with a non-nominal height and parameters which are within

said nominal range are displayed with a same nominal height; (Hussaini discloses in

figure 3, parameters outside of the predefined nominal range having towers with an

other than normal height, i.e. the height is not completely shaded to indicate height but

show under flow and over flow conditions) and allowing selection of parameters, which

are displayed in said prominent way, and changing said parameters to be changed to

being displayed in said non-prominent way. (Hussaini discloses displaying bar graphs

in a underflow and over flow conditions, center error bar graph, level bar graph with

status at top element, range indicator bar graph, clock bar graph, bi-level bar graph,

etc., pages 653-655) and wherein said selection comprises moving said parameters

displayed in said prominent way to a special section for parameters which are each

outside said specified nominal range, and in which section all parameters are displayed

in said non prominent way. (Hussaini discloses the bar graphs and the dynamic

characteristics of process variable are programmable to make it flexible for a wide range

of applications for operator efficiency, page 656)

With respect to dependent claim 31, wherein said selection comprises allowing

reset of a parameter value, to display said parameter value in said non prominent way

even when said parameter value is outside said nominal range, said reset continuing for

a specified time. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 32, wherein said selection comprises selection of parameters, which are outside said nominal range. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 33, wherein said selection of parameters comprises selection of parameters, which are in an alarm state. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 34, further comprising defining an alarm group, having a plurality of parameters therein, each of which are in alarm, but are displayed in said non prominent way, and said allowing selection comprises allowing the user to move said parameters to said alarm group. (Hussaini discloses the bar graphs and the dynamic characteristics of process variable are programmable to make it flexible for a wide range of applications for operator efficiency, page 656)

With respect to dependent claim 35, wherein said parameters are displayed as items with variable height, a nominal height representing a parameter that is within said nominal range, and heights other than said nominal height representing parameters outside said nominal range. (Hussaini discloses range indication bar graph having a height which show the status ranges and pre-alarms approaching conditions, page 655)

With respect to dependent claim 36, further comprising defining an alarm level for each of said parameters, and wherein a height of said parameter that is outside said nominal range is related to a percentage by which said parameter value exceeds said nominal range and approaches said alarm level. . (Hussaini discloses range indication bar graph having a height which show the status ranges and pre-alarms approaching conditions, page 655)

With respect to dependent claim 37, further comprising displaying a common alarm grid, at a height representing said alarm level, and wherein each of said plurality of parameters reaches said alarm level at an individual value which is individual for said parameter. (Hussaini discloses indicating alarm status ranges, page 652)

With respect to dependent claim 38, wherein said alarm level is a warning level or critical level or a trend alarm. (Hussaini discloses several sub ranges to indicate alarm status, page 651)

With respect to dependent claim 39, further comprising defining at least one trend alarm, which indicates the trend of the value of the parameter suggests that an alarm will occur prior to the alarm actually occurring. Hussaini discloses range indication bar graph having a height which show the status ranges and pre-alarms approaching conditions, page 655)

With respect to dependent claim 40, further comprising monitoring a rate of change of a parameter over a specified period, determining if said rate of change of said parameter and said specified period exceeds a specified value, and establishing a trend alarm when said rate of change of said parameter and said specified period meets said

specified criteria. (Hussaini discloses dynamic graphic displays which show relative change, direction of change, rate of change, frequency of change, etc., page 651 and further discloses range indicator having a pre-alarm an approaching condition, page 655)

As per independent claims 41, 56, 67, 76, 80 and 82, they are rejected based upon similar rational as above independent claim 1.

With respect to dependent claims 42-55, 57-66, 68-75, 77-79 and 81, see above rejection for dependent claim 2-28 and 30-40.

As per independent claim 83, an apparatus, comprising: a processing element . . . and a display forming element . . . and dependent claims 84, 85, and 87-89, they are rejected based upon similar rational as above independent claim 1 and dependent claims 2, 5, 22 and 14 respectively.

With respect to dependent claim 86, further comprising a memory, storing a nominal range for each of said plurality of parameters, and wherein said display forming element displaying said each of said plurality of parameters based on their relationship with said nominal range. (Hussaini discloses the graph types can be implemented with software for computer graphic displays and enhance their performance, therefore making it inherent that the data is stored, page 656)

Response to Arguments

6.   Applicant's arguments filed 01/29/2004 have been fully considered but they are not persuasive.

Applicant argues that Hussaini fails to disclose heights of towers that are within a nominal range having nominal height and towers outside the nominal range having other than nominal height. Hussaini discloses bar graphs, having height characteristics, used to display dynamic characteristics by interrelationships of variables. Hussaini further discloses the data for relative change in a variable with respect to its full scale, thus providing a nominal range graph of the data characteristic and discloses in addition to the full scale sub ranges may indicated the variable status such as low, normal and high values, thus providing height changes within each sub range displayed.

5.   In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., values with a nominal range height does not change are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Hussaini fails to disclose nominal height for items outside the nominal range having a height related to the amount of the alarm for those that are outside the nominal range. Hussaini disclose that values that lie within the status range as having height in the range level, see figure 2, and indicated by a line pattern. Hussaini further discloses for each of the bar graphs and for those outside the height specification, or nominal range, having a height different than the nominal range height, i.e. the height for the elements in figure 2 show data parameters indicated with a line pattern and the data parameters in figure 3 show elements having under flow and over

flow conditions, outside the nominal range, having height indicated by a line pattern and not the color code pattern for the nominal range data elements, therefore providing different height characteristics.

Applicant argues that Hussaini fails to disclose a percentage by which the parameter value exceeds the nominal range and approaches an alarm value. Hussaini discloses a level indicator and alarm status bar graph on page 653, and further disclose the over flow and under flow conditions and dynamic graphic displays which show relative change, direction of change, rate of change, frequency of change, etc., page 651 and further discloses range indicator having a pre-alarm an approaching condition, page 655.

Conclusion

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
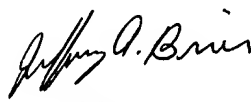
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa A. Good-Johnson whose telephone number is (703) 305-3939. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Motilewa A. Good-Johnson
Examiner
Art Unit 2672

mgj
April 18, 2004

JEFFERY BRIER
PRIMARY EXAMINER